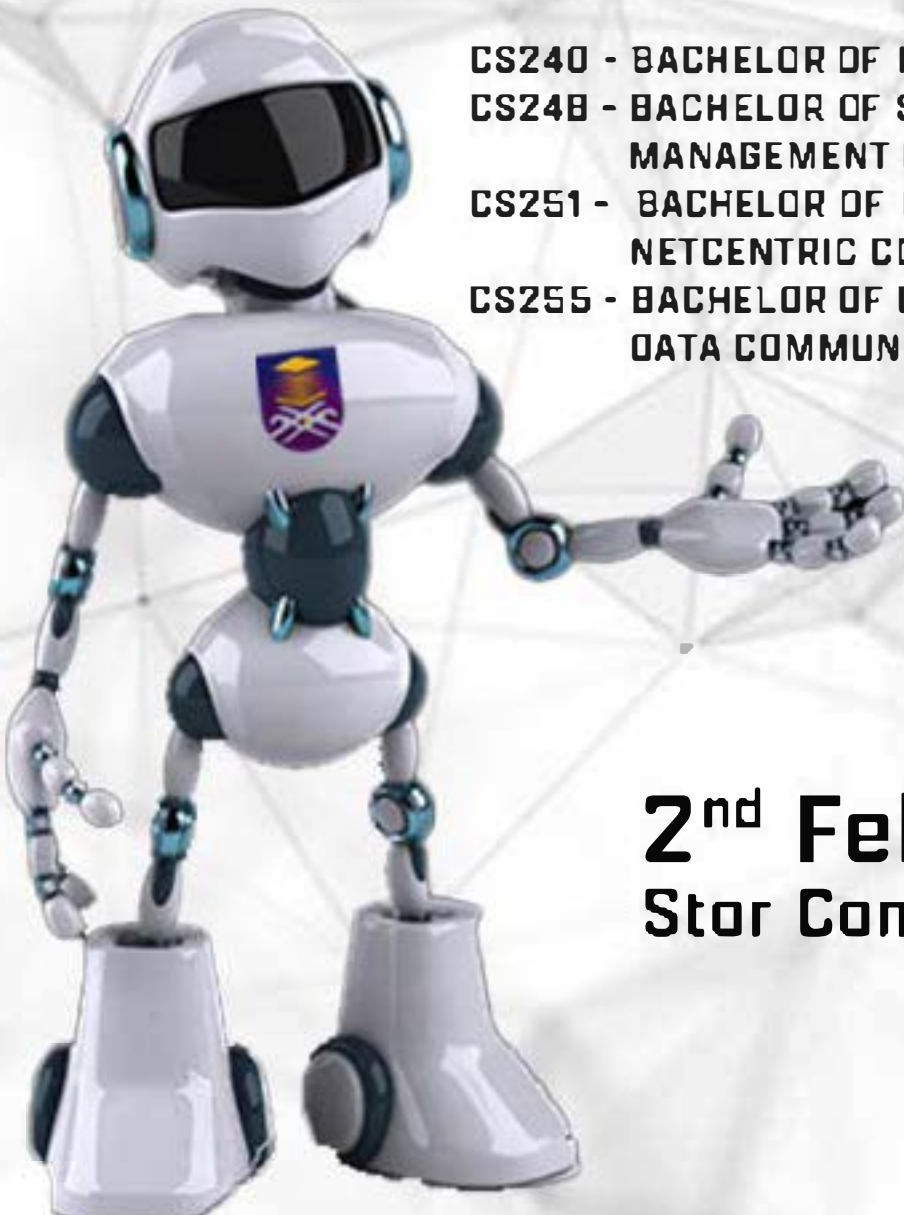


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**RESEARCH EXHIBITION IN MATHEMATICS & COMPUTER SCIENCES**

# **REMACS 5.0**

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**CS240 - BACHELOR OF INFORMATION TECHNOLOGY [HONS.]**  
**CS248 - BACHELOR OF SCIENCES [HONS.]**  
**MANAGEMENT IN MATHEMATICS**  
**CS251 - BACHELOR OF COMPUTER SCIENCE [HONS]**  
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**CS255 - BACHELOR OF COMPUTER SCIENCE [HONS]**  
**DATA COMMUNICATION & NETWORKING**

**2<sup>nd</sup> February 2023**  
**Stor Complex, UiTM Perlis**

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**Organized by:**  
**College of Computing, Informatics and Media**  
**Universiti Teknologi MARA Perlis Branch**

**Research Exhibition in Mathematics and Computer Sciences  
(REMACS 5.0)**

Research Exhibition in Mathematics and Computer Sciences (REMACS 5.0)

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# Preface

It is with great pleasure that we present this extended abstract book, titled "The 5<sup>th</sup> Research Exhibition in Mathematics and Computer Sciences (REMACS 5.0)". This book is a collection of research work in the fields of Computer Science and Mathematics, contributed by the final year students from Universiti Teknologi MARA, Perlis Branch. The aim of this book is to showcase the diversity and depth of research in these two interrelated fields.

Mathematics and Computer Science are two fields that have seen tremendous growth and advancement in recent years. With the rise of new technologies and the increasing demand for data-driven solutions, researchers in these fields have been working hard to develop new theories, algorithms, and models that can help solve some of the most pressing problems of our time. This book is a testament to their hard work and dedication.

The abstracts in this book cover a wide range of topics, including algebra, analysis, logic, computer architecture, algorithms, artificial intelligence, machine learning, computer network, netcentric computing and many more. The work presented here is both theoretical and practical, and has the potential to impact many areas of society, from finance and healthcare to education and security.

We hope that this book will serve as a valuable resource for future students in the fields of Mathematics and Computer Science. We also hope that it will inspire more students to pursue innovative and groundbreaking research in these two fields. Finally, we would like to express our gratitude to all the contributors for their hard work and dedication, without which this book would not have been possible.



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# EVENT SCHEDULE

8:00 – 8:30 am

- Registration

8:00 am – 12:00 pm

- FYP Project Presentation

12:00 - 2:00pm

- Lunch Break

2:15 – 2:35 pm

- National & Wawasan Setia Anthems
- Doa Recitation

2:35 – 2:45 pm

- Welcoming Address by Director of REMACS 5.0

2:45 – 2:55 pm

- Officiating & Closing Remarks from Rector of UiTM Perlis

2:55 – 3:00 pm

- REMACS 5.0 Montage

3:00 – 4:00 pm

- Awarding of Winners:
  - Best Poster
  - Best Project Award

- Photo Session

- End of Ceremony

*Dress Code: Formal / Corporate*

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# EXTENDED ABSTRACTS

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RESEARCH EXHIBITION IN MATHEMATICS & COMPUTER SCIENCES  
**REMACS 5.0**

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# DEVELOPING A CATERING SERVICES MOBILE APPLICATION FOR LOCAL COMMUNITY

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## **Abstract**

The catering booking system's mobile app for Gua Musang Kelantan's local community makes catering booking easier for both community members and catering owners. It has a user-friendly interface, owner options, and food menus. The system allows for catering bookings to be made at any time, and the catering owner can access the booking list at all times. The app is being developed using Android Studio and Firebase, following an Agile Model with a clear lifecycle phase. This will help streamline the booking process and reduce wait times for the community.

**Keywords:** booking, community, mobile application, android studio, catering

## **1. Introduction**

In carrying out this project entitled developing a catering services mobile application for local community, it is guided by three main objectives which are to identify and analyse the problem of catering service for local community, to design and develop a mobile apps for catering services, to evaluate the system and using functionality and usability testing. These three objectives are the target in achieving the requirements in the development of this catering booking application for the local community. For the scope of this project is to develop a mobile application-based catering booking system for catering operators as well as consumers. In general, this system will allow customers to book online at a flexible time, choose the type of event to be held, choose the type of food menu that can be booked and use unique features that allows them to make endless catering bookings.

## **2. Methodology**

The researcher adopted the Agile System Development Life Cycle (SDLC) method for this project, including analysis, design, development, testing, and documentation phases. The analysis phase involved determining software and equipment needs, while the design phase involved creating an ERD and project design using Justinmind. The development phase used Android Studio and Firebase as the database. During testing, user-centered usability and functionality tests were performed. Finally, the documentation phase involved evaluating results and improving project weaknesses.

## **3. Results and Discussion**

Usability and functionality tests were conducted on 30 users to gauge their satisfaction with the application. The results, based on categories such as User Interface Satisfaction, Perceived Usefulness and Ease of Use, and Attitude, showed weaknesses such as a lack of admin system, dependence on an active internet connection, and limited menu options. To improve the system, the researcher recommends increasing menu options and making it easier for the admin to update services and for users to update their profile picture. Ultimately, the researcher concluded that the catering booking system is manageable, usable, and effective in helping users and administrators manage transactions and reservations.

#### **4. Novelty of Research / Product**

The mobile catering booking app allows users to book services for events they're hosting. It displays available catering options on the desired date to make booking easier. Once a booking is made, users can view the details of their order history including the type and quantity of food. The app also includes a feature to delete history if desired. The administrator can manage bookings more efficiently and organize their schedule systematically. Booking requests require approval from the admin, who can notify users of changes via WhatsApp.

#### **5. Conclusion**

Finally, the catering booking for local community mobile application is a project that intends to assist users, specifically public users and catering parties, in making catering bookings as well as managing bookings that have already been made by users. Additionally, this initiative seeks to make it easier for general public users to book caterer bookings whenever they want, even at the crack of dawn.

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